

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/067178 A1

(51) International Patent Classification⁷: **H04B 7/26**

(21) International Application Number:
PCT/KR2005/000050

(22) International Filing Date: 7 January 2005 (07.01.2005)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2004-0001284 8 January 2004 (08.01.2004) KR
10-2004-0001283 8 January 2004 (08.01.2004) KR

(71) Applicant (for all designated States except US): **SK TELECOM CO., LTD.** [KR/KR]; 99, Seorin-dong, Jongro-gu, Seoul 110-110 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KIM, Hyun-Wook** [KR/KR]; #701-202 Jeongdeun-Hanjin Apt., 194, Jeongja-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-010 (KR). **KIM, Young-Lak** [KR/KR]; #104-1306 Sinil Apt., Eonnam-ri, Guseong-myeon, Yongin-si,

Gyeonggi-do 449-915 (KR). **KIM, Nam-Gun** [KR/KR]; #1479-2, Seocho 3-dong, Seocho-gu, Seoul 137-073 (KR). **IHM, Jong-Tae** [KR/KR]; #304-502 Dongsin Apt., Imae-dong, Bundang-gu, Seongnam-si, Gyeonggi-do 463-060 (KR).

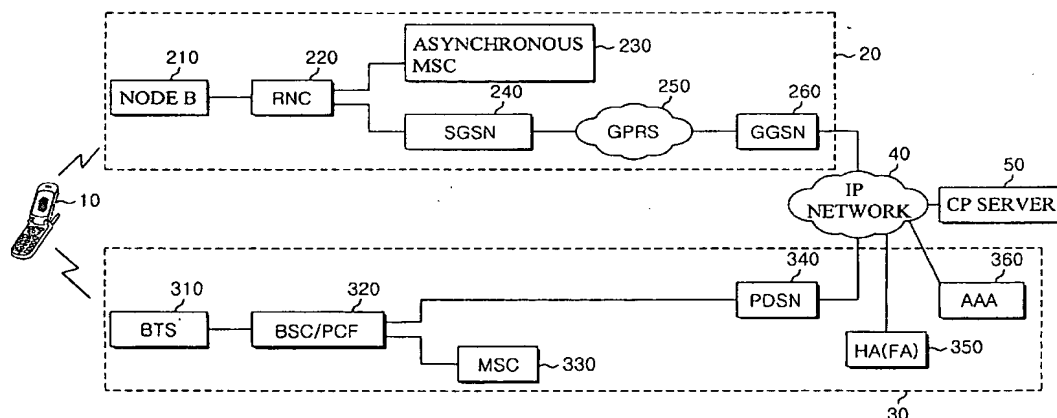
(74) Agents: **KIM, Seong-Nam** et al.; 17th Floor, City Air Tower, 159-9 Samsung-dong, Gangnam-gu, Seoul 135-973 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: SYSTEM FOR PACKET DATA SERVICE IN THE MIXED NETWORK OF ASYNCHRONOUS COMMUNICATION NETWORK AND SYNCHRONOUS COMMUNICATION NETWORK AND HAND-OVER METHOD THEREOF



(57) Abstract: Disclosed herein is a mobile communication terminal and handover method therefor, which enable handover of a mobile communication terminal that is using a packet data service or is in a dormant state in a mobile communication network in which asynchronous and synchronous networks coexist. In the handover method, if a channel is assigned between a mobile communication terminal and a synchronous mobile communication system in response to a request from an asynchronous mobile communication system as a mobile communication terminal using packet data service in the asynchronous mobile communication system moves into an area of the synchronous mobile communication system, call setup is performed. A node B of the asynchronous mobile communication releases a connection to the mobile communication system and assigns a new mobile IP to the mobile communication terminal, thus providing continuous packet data service to the mobile communication terminal.

WO 2005/067178 A1

WO 2005/067178 A1



FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*